

AMENDMENTSIN THE CLAIMS:

Please cancel claims 1-13, 15-22, 38, 41 and 45-49. Please add new claims 52-78 as follows:

52. (New) A method of detecting a presence of a target polynucleotide in a test sample, the method comprising:

(a) contacting the test sample with at last one reagent polynucleotide having a sequence selected from the group consisting of SEQ ID NOS:1-7, complete complements of SEQ ID NOS:1-7 and degenerate coding sequences thereof; and

(b) detecting the presence of the target polynucleotide in the test sample, the target polynucleotide binding to the reagent polynucleotide.

53. (New) The method of claim 52, further comprising:

attaching the target polynucleotide to a solid phase prior to performing step (a).

54. (New) The method of claim 52, further comprising:

attaching the reagent polynucleotide to a solid phase prior to performing step (a).

55. (New) The method of claim 52, wherein the presence of the target polynucleotide in the test sample is indicative of breast disease.

56. (New) A method for detecting mRNA in a test sample, the method comprising:
- (a) performing reverse transcription on the test sample using at least one oligonucleotide primer in order to produce cDNA;
- (b) amplifying the cDNA obtained from step (a) using at least one sense oligonucleotide primer and at least one antisense oligonucleotide primer to obtain an amplicon; and
- (c) detecting a presence of the amplicon, wherein the oligonucleotides utilized in steps (a) and (b) have a sequence selected from the group consisting of SEQ ID NOS:1-7, complete complements of SEQ ID NOS:1-7 and degenerate coding sequences thereof.

57. (New) The method of claim 56, further comprising:
reacting the test sample with a solid phase.

58. (New) The method of claim 56, further comprising:
utilizing a detectable label capable of generating a measurable signal.

59. (New) ~~The method of claim 56, wherein the presence of the amplicon is indicative of breast disease.~~

60. (New) A method of detecting a target polynucleotide in a test sample suspected of containing the target polynucleotide, comprising:

(a) contacting the test sample with at least one sense primer oligonucleotide and with at least one anti-sense primer oligonucleotide and amplifying to obtain a first stage reaction product;

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(b) contacting said first stage reaction product with at least one other oligonucleotide to obtain a second stage reaction, with the proviso that the other oligonucleotide is located 3' to the oligonucleotides utilized in step (a) and is complementary to the first stage reaction product; and

antisequence
bases
(c) detecting the second stage reaction product as an indication of a presence of the target polynucleotide, wherein the oligonucleotides utilized in steps (a) and (b) have a sequence selected from the group consisting of SEQ ID NOS:1-7, complete complements of SEQ ID NOS:1-7 and degenerate coding sequences thereof.

61. (New) The method of claim 60, further comprising:
reacting the test sample is reacted with a solid phase.

62. (New) The method of claim 60, further comprising:
utilizing a detectable label, the detectable label capable of generating a measurable signal.

63. (New) The method of claim 62, further comprising:
reacting the detectable label to a solid phase.

64. (New) The method of claim 60, wherein the presence of second stage reaction product is indicative of breast disease.

65. (New) A test kit useful for detecting polynucleotide in a test sample, the test kit comprising a container containing at least one polynucleotide having a sequence selected from the group consisting of SEQ ID NOS:1-7, complete complements of SEQ ID NOS:1-7 and degenerate coding sequences thereof.

66. (New) The test kit of claim 65 further comprising:
tools useful for collecting the test sample, the tools selected from the group consisting of lancets, absorbent paper, cloth, swabs and cups.

67. (New) A purified polynucleotide having a sequence selected from the group consisting of SEQ ID NOS:1-3, 6-7, complete complements of SEQ ID NOS:1-3, 6-7 and degenerate coding sequences thereof.

68. (New) The polynucleotide of claim 67 wherein the polynucleotide hybridizes selectively to a nucleic acid sequence.

69. (New) The polynucleotide of claim 67 wherein the polynucleotide is produced by recombinant techniques.

70. (New) The polynucleotide of claim 67 wherein the polynucleotide is produced by synthetic techniques.

71. (New) The polynucleotide of claim 67 further comprising:
a sequence encoding at least one epitope.

72. (New) The polynucleotide of claim 67, wherein the polynucleotide is attached to a solid phase.

73. (New) The polynucleotide of claim 72, wherein the solid phase further comprises an array of polynucleotide molecules.

74. (New) The polynucleotide of claim 67, wherein the polynucleotide codes for a protein, the protein comprising an amino acid sequence having SEQ ID NO:17.

75. (New) The polynucleotide of claim 67 wherein the polynucleotide comprises DNA having a sequence selected from the group consisting of:

SEQ ID NO:6, SEQ ID NO:7, complete complements of SEQ ID NO:6, SEQ ID NO:7 and degenerate coding sequences thereof.

76. (New) A recombinant expression system comprising:
a nucleic acid sequence that includes an open reading frame, the open reading frame operably linked to a control sequence compatible with a desired host, the nucleic acid sequence selected from the group consisting of SEQ ID NOS:1-7, complete complements of SEQ ID NOS:1-7 and degenerate coding sequences thereof.

77. (New) A cell transfected with the recombinant expression system of claim 76.

78. (New) A cell transfected with a nucleic acid sequence encoding at least one epitope, wherein the nucleic acid sequence is selected from the group consisting of SEQ ID NOS:1-7, complete complements of SEQ ID NOS:1-7 and degenerate coding sequences thereof.